

Claim Rejection Under 35 U.S.C. § 102

Claims 1, 3, 5-7, 9, 11-13, 15, 17-20 stand rejected under 35 U.S.C. §102(e) as being anticipated by Thrasher et al. (U.S. Patent No. 5,952,820). This rejection is respectfully traversed.

Thrasher et al. teaches a foreign voltage detector for detecting and warning of the presence of potentially dangerous voltage levels on conductors such as power cables, metal utility boxes, metal building frames and the like. The detector includes a capacitive leaf sensor that is charged through capacitive coupling when brought near a conductor. Embedded within an insulated probe tip 14 of the detector 11 is a small conducting strip 21. The strip 21 is bent in the shape of a horseshoe and preferably is made of brass. The strip 21 forms one plate of a capacitor with the conductor that is being measured forming the other plate.

The horseshoe shape of the strip 21 ensures that a portion of the strip 21 will be located at about the same distance from a conductor to be tested no matter how the probe tip 14 is positioned against the conductor. In operation, when the strip 21 is placed adjacent to a conductor that carries an AC voltage, the strip 21 becomes capacitively coupled to the conductor, and a charge is induced through capacitive coupling in a brass strip input sensor 22.

There is no teaching or suggestion within the Thrasher et al. patent document that approaches the recitations in independent claims 1, 7 and 19. In particular, Thrasher et al. fails to teach or suggest at least “wherein the probe conductor is *equidistant* with the insulator *along the contact surface*.”

(Emphasis added). Independent claims 1, 7 and 19 set forth such recitation. Thrasher et al. merely discloses that a conducting strip 21 within the probe tip 14 ensures that a portion of the strip will be located at about the same distance from a *conductor to be tested* no matter how the probe tip 14 is positioned against the conductor. However, Thrasher et al. fails to teach or suggest a probe conductor that is equidistant with the insulator along the contact surface of the insulator.

In particular, the probe tip 14 taught by Thrasher et al. is conically or triangularly shaped at its remote end (i.e., end contacting a conductor to be tested) with the conductor strip 21 having a horseshoe shape. Therefore, it is a geometric impossibility for the conducting strip 21 to be equidistant with the insulator along the contact surface of the insulator as recited in independent claims 1, 7 and 19. The distance between the contact surface of the probe tip 14 and the conducting strip 21 will necessarily vary due to the different shapes of the probe tip 14 and conducting strip 21.

Further, Thrasher et al. fails to teach or disclose to one skilled in the art how to make a detector having a probe tip 14 with a conducting strip 21 therein that ensures that a portion of the conducting strip 21 will be located at about the same distance from a *conductor to be tested* no matter how the probe tip 14 is positioned against the conductor. The Thrasher et al. patent document fails to enable in the specification or show an enabling drawing that teaches a conducting strip 21 located at about the same distance from a *conductor to be tested* no matter how the probe tip 14 is positioned against the conductor.

Specifically, using the probe tip 14 at different angles will result in different distances between the conducting strip 21 and the conductor to be tested due to the different shapes of the probe tip 14 and conducting strip 21. Thus, Applicant submits that Thrasher et al. is not even enabling with respect to this teaching.

Therefore, Applicant respectfully submits that Thrasher et al. fails to teach or suggest each and every element in the independent claims and the rejection under 35 U.S.C. § 102(e) is improper. Further, Applicant submits that claims 3, 5, 6, 9, 11-13, 15, 17, 18, and 20 each depend from an allowable independent claim and are likewise allowable for at least the same reasons as the independent claims from which they depend.

Claim Rejection Under 35 U.S.C. § 103

Claims 2, 4, 8, 10, 14, and 16 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Thrasher et al. in view of Scott et al. (U.S. Patent No. 5,748,002). This rejection is respectively traversed.

Scott et al. teaches an RF probe for monitoring the composition of substances using single-ended coupling of a load-pulled oscillator to a system being tested. The probe contains a stripline structure with a central strip coupled to a central wire of a coaxial input, and a surrounding plane coupled to the shielding of the coaxial input. A constant-impedance transmission line structure is thereby provided. Further, Scott et al. teaches that the dimensions of the central strip and separation of that strip from the adjacent surrounding

plane (i.e., gap spacing), as well as the overall dimensions of the substrate may be varied and should be selected to maintain an impedance match to the incoming line.

Applicant submits that there is no teaching or suggestion within the Scott et al. patent document that makes up for the deficiencies in the Thrasher et al. patent document and that approaches the limitations of the independent claims as discussed above. Further, claims 2, 4, 8, 10, 14 and 16 each depend from an allowable independent claim and are likewise allowable for at least the same reasons as the independent claims from which they depend.

CONCLUSION

Accordingly, in view of the above remarks, and all of the stated grounds of rejection having been properly traversed, accommodated, and/or rendered moot, reconsideration of the rejections and allowance of each of claims 1-20 in connection with the present application is earnestly solicited. It is believed that a full and complete response has been made to the outstanding Office Action, and as such, the present application is in condition for allowance.


Should there be any outstanding matters that need to be resolved in the application before allowance thereof, the Examiner is invited to contact Gary D. Yacura (Reg. No. 35,416) at (703) 668-8023.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit

Account No. 08-0750 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees.

Respectfully submitted,

By:

A handwritten signature in black ink, appearing to be "G. Yacura", written over a horizontal line.

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